

Okeanos Explorer ROV Dive Summary

Dive Information			
General Location	<p style="text-align: center;">Gulf of Mexico 2017</p>		
	General Area Descriptor	Gulf of Mexico	
	Site Name	Wreck 15377	
	Science Team Leads	Diva Amon and Charles Messing	
	Expedition Coordinator	Brian Kennedy	
	ROV Dive Supervisor	Dan Rogers	
	Mapping Lead	Mike White	
ROV Dive Name			
Cruise	EX1711		
Leg	-		
Dive Number	DIVE07		
Equipment Deployed			
ROV	Deep Discoverer		
Camera Platform	Seirios		
ROV Measurements	<input checked="" type="checkbox"/> CTD	<input checked="" type="checkbox"/> Depth	<input checked="" type="checkbox"/> Altitude

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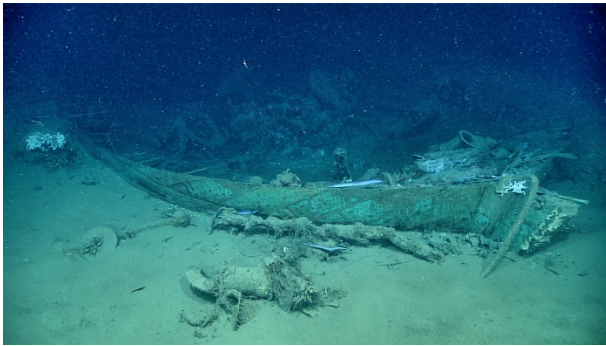


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Purpose of the Dive	To explore and characterize wreck 15377		
Description of the Dive	<p>EX1711 Dive 7 was at an unknown shipwreck identified by BOEM as ID Number 15377, approximately 65 km ESE of the Southeast Pass of the Mississippi River. The ROV descended to a featureless silty bottom at 686 meters and navigated to the shipwreck, approaching the bow of the wreck first. The wreck had a wooden hull, clad in copper sheets for anti-fouling protection and fastened by copper bolts and likely spikes. The bolts appeared to have clench rings or forelocks, a feature of heavy-built wooden ships of the early to mid-19th century. The copper sheathing was applied using copper tacks, which were visible in areas where the hull planking had been consumed by marine organisms. None of the hull above the water line of the ship where the copper sheathing ended has survived. The upper edge of sheathing shows no sign of damage through collision, fire, or slow collapse of the upper works after sinking. The copper sheathing at the bow follows the traditional 19th century pattern for sheathing with the copper conforming to the swell of the bow.</p> <p>The surviving portion of the hull below the waterline is approximately 32 m long by 10 m wide. Lead draft marks were tacked to the stem post at what appeared to be one-foot interval with the Arabic numbers “12” at the mudline and “13” above it. This indicates that approximately 3.81 meters of the hull lies beneath the sediment, which would incorporate the entire hold of the vessel as well as a possible lower deck. Surviving timber and longer bolts at the edge of the sheathing line suggest that this was the level of a deck that may have in part collapsed into the hold during the transformation of the sunken ship into a shipwreck site.</p> <p>A hole observed above the “13” that penetrates the stem may have marked where the bowsprit was gammoned. Just aft of the stem posts were dual lead hawse pipes on both starboard and port sides, through which the anchor cables would have run. A largely buried anchor was observed outboard of the starboard bow where it would have been catted, with one fluke and the outline of the iron stock</p>		



	<p>exposed. The ROV then began a slow circuit down the starboard side of the vessel, documenting a large sheet anchor stowed on deck amidships, remnants of a suction bilge pump with cast-iron flywheels, and a ship's cast-iron stove. The remains of the pump lay around a circular feature that we believe is the outline of the ship's foremast, which, although consumed by marine organisms, is delineated by corrosion by-product. Continuing further aft, remains of chain plates which supported the standing rigging for the foremast was observed on both the port and starboard sides. Their positioning and number indicate that this was likely a three-masted vessel with either a ship or bark rig.</p> <p>Many small artifacts were noted, including what is believed to be a stoneware bottle; a basin and pitcher; numerous hand-blown wine, liquor, and beer bottles; and a Transferware cup. Also noted in the stern quarter were a number of coarseware ceramic storage jars, including an unusual yellow-glazed jug with four horizontal loop handles similar to ones seen on other wrecks in the Gulf and a narrow neck. Some remarkably fragile artifacts also survive, such as multiple stemmed ale flutes. In general, it seems likely, based on our preliminary analysis of the artifacts, the hull form, fasteners, and rigging elements, that the ship likely post-dates 1830 to perhaps mid-century. It likely was a square-rigged ship with three masts. It was a heavily constructed merchant ship, built for long ocean voyages and carrying bulk cargo; its builders valued cargo capacity over speed.</p>	
Overall Map of the ROV Dive Area	Close-up Map of Main Dive Site	
Redacted	Redacted	
Representative Photos of the Dive		

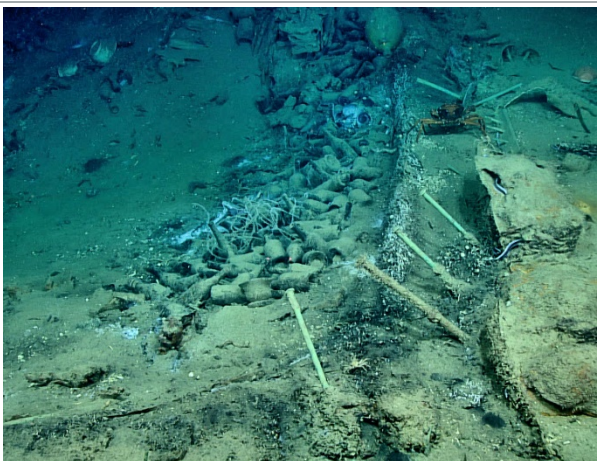




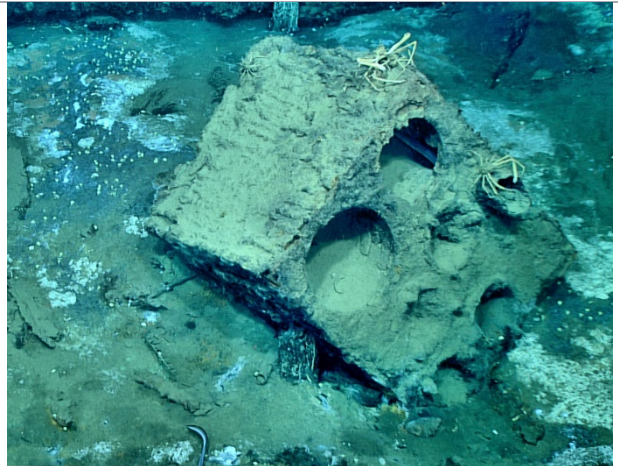
First view of the wreck's bow outlined by the remnant copper sheathing, with one hawse pipe in foreground, another just aft of the stempost at right, and white colonies of the stony coral *Lophelia pertusa* (on the stempost and at far left). The eels are *Nettastomatidae* ("duckbill eels").



Transferware cup and open end of a glass bottle found toward the stern.



Pile of chiefly glass bottles, with possible mortar, other containers, and a mass of more recent fishing line at the stern. A white porcelain washbasin and ewer are visible at upper left. The long metal rods are a few of the many along the perimeter that held the copper sheathing to the now lost wooden hull.



Ship's stove, found amidships, with two spider crabs, *Rochinia crassa*.

Samples Collected

Sample

Sample ID	
Date (UTC)	
Time (UTC)	
Depth (m)	

No samples were collected during this dive

Temperature (° C)		
Field ID(s)		
Commensal ID and Field Identification		
Comments		

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